FIG.1

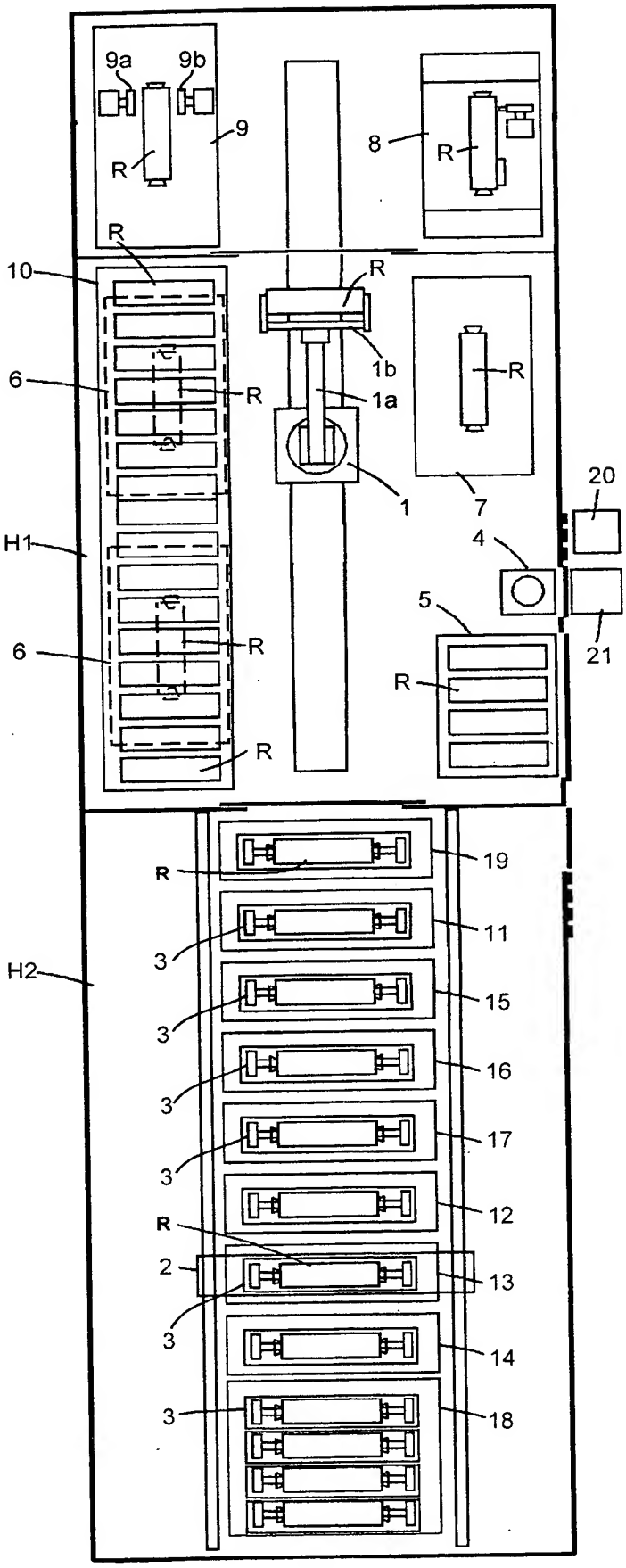

9a
9b
9
R
8
R
R
10
R
1b
6
R
1a
R
1
7
20
H1
4
5
21
6
R
R
R
19
R
11
3
H2
15
3
16
3
17
3
12
R
2
13
3
14
3
18

FIG.2

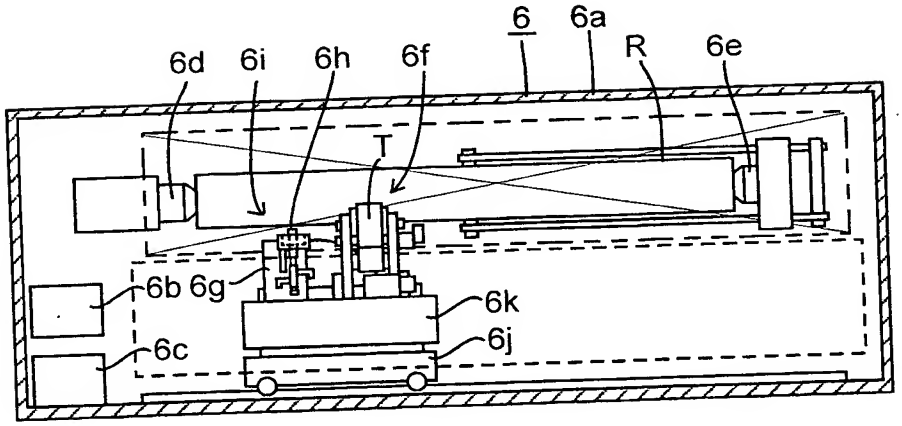


FIG.3

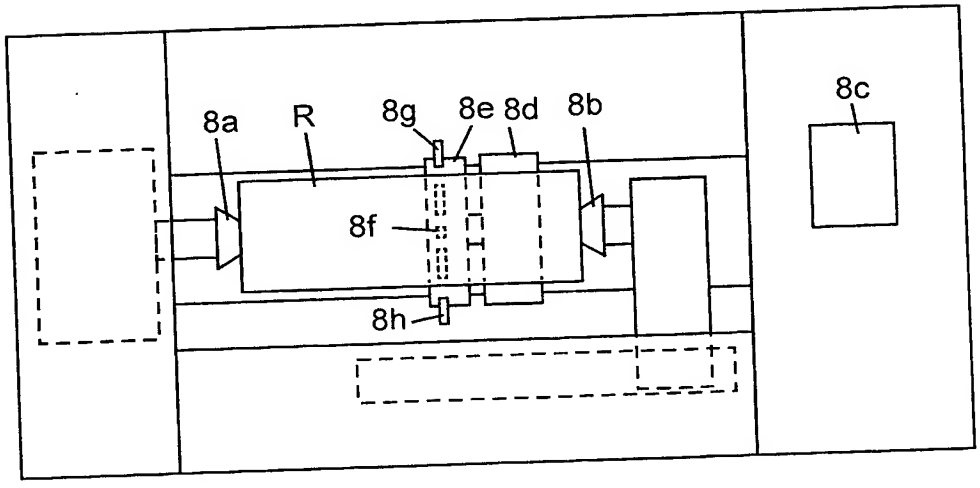


FIG.4

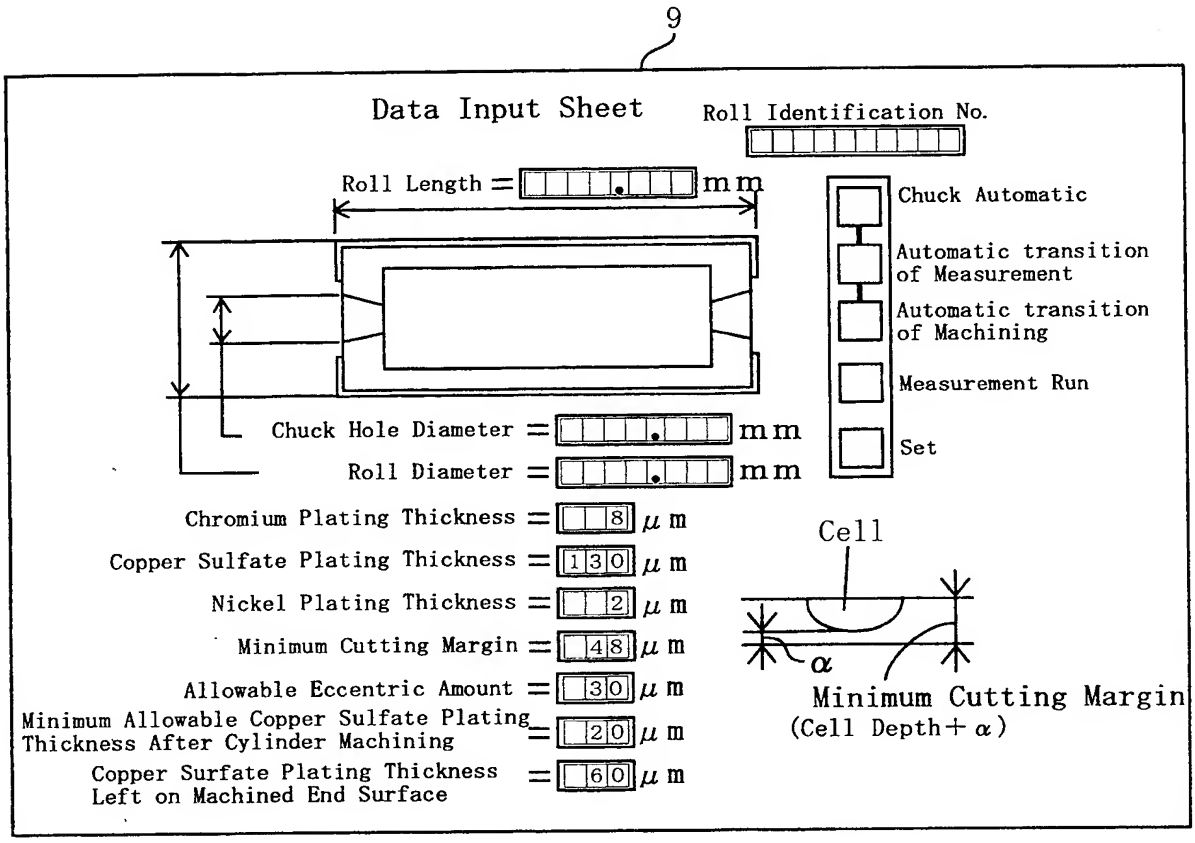
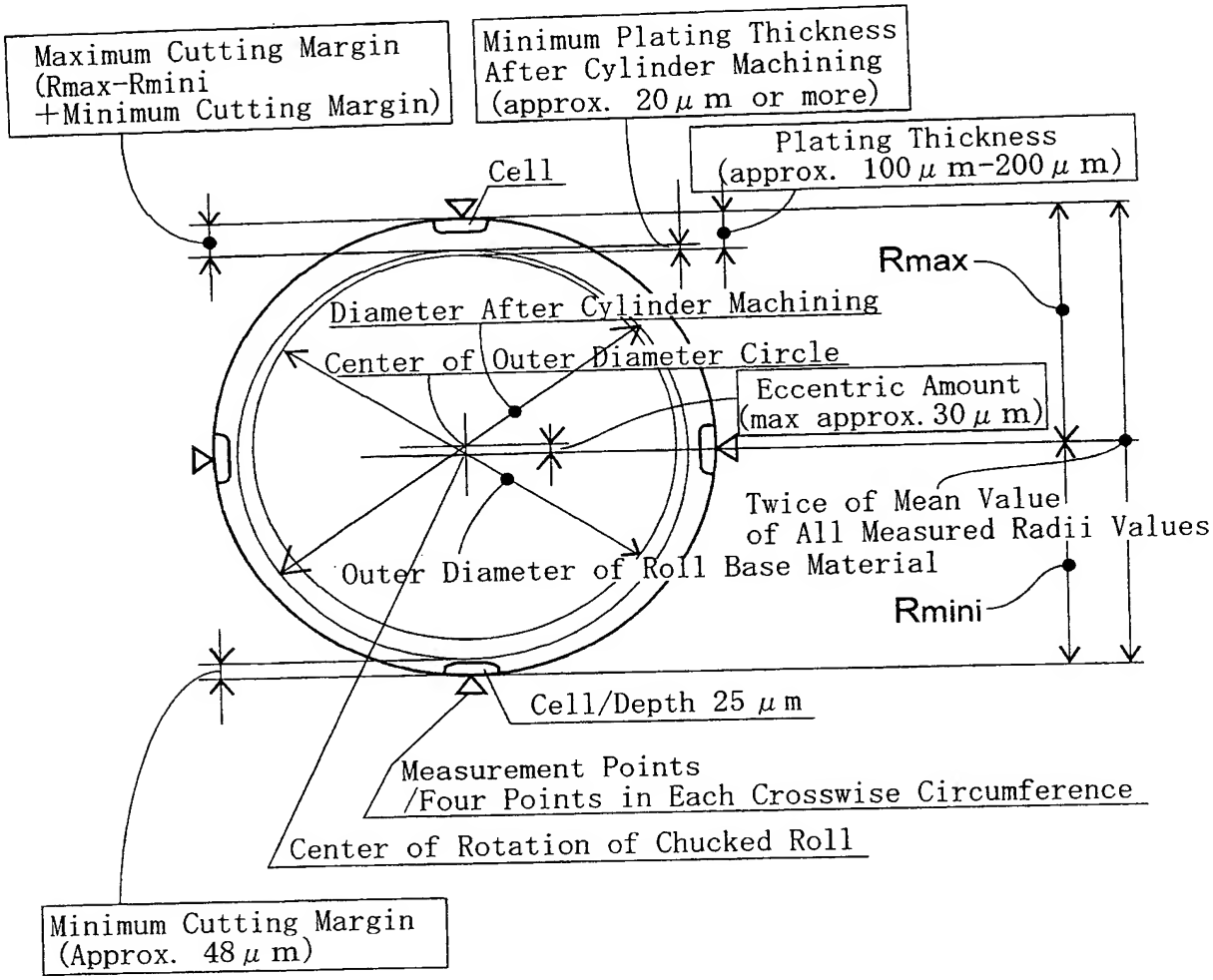

9
Data Input Sheet
Roll Identification No.
Roll Length = mm
Chuck Automatic
Automatic transition of Measurement
Automatic transition of Machining
Measurement Run
Set
Chuck Hole Diameter = mm
Roll Diameter = mm
Chromium Plating Thickness = 8 μm
Copper Sulfate Plating Thickness = 130 μm
Nickel Plating Thickness = 2 μm
Minimum Cutting Margin = 48 μm
Allowable Eccentric Amount = 30 μm
Minimum Allowable Copper Sulfate Plating Thickness After Cylinder Machining = 20 μm
Copper Surfate Plating Thickness Left on Machined End Surface = 60 μm
Cell
α
Minimum Cutting Margin
(Cell Depth + α)

FIG.5


Maximum Cutting Margin
(Rmax-Rmini
+Minimum Cutting Margin)
Minimum Plating Thickness
After Cylinder Machining
(approx. 20 μm or more)
Plating Thickness
(approx. 100 μm-200 μm)
Cell
Rmax
Diameter After Cylinder Machining
Center of Outer Diameter Circle
Eccentric Amount
(max approx. 30 μm)
Twice of Mean Value
of All Measured Radii Values
Outer Diameter of Roll Base Material
Rmini
Cell/Depth 25 μm
Measurement Points
/Four Points in Each Crosswise Circumference
Center of Rotation of Chucked Roll
Minimum Cutting Margin
(Approx. 48 μm)